

Impact of Typhoons on the Western Pacific: Observing the Evolution of Typhoon Wakes

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1 March 2008 – 30 September 2011, with Steve Jayne (WHOI).

I am currently funded as part of the Typhoon DRI to integrate microstructure sensors to gliders in order to observe the temporal and spatial evolution of typhoon wakes. I am actively planning the scientific and logistical aspects of the glider deployments. At the end of September I met with Steven Jayne at WHOI to discuss our plans to measure to formation and the evolution of the wakes.

For the integration of the microstructure, we are currently considering getting the hardware from one of two sources: Mike Gregg's group at APL, who is developing a micro-temperature sensor for the APEX floats (NSF project), or from Rockland Scientific International (Rolf Lueck). We are trying to balance taking advantage of the expertise that already exists at APL with using commercially available hardware. We are planning on meeting with Rockland Scientific International later this month.

In the next months, we plan to 1) order or start building the microstructure hardware before the Typhoon Workshop in November, 2) start the mechanical integration of the microstructure sensors into one Seaglider at APL in December and January, 3) test a Seaglider equipped with microstructure in Puget Sound in the early spring, and possibly participate to the test field program next summer.